

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A sterile air trolley comprising:

a mobile casing having at least one air inlet in its lower region and a plurality of air outlets in its upper region, and enclosing an impeller operative to move air in through the at least one inlet, through a filter and out of the casing by way of the outlets, the upper region of the casing providing a substantially horizontal work surface;

~~and means for giving rise to a continuously replenished rising layer of filtered air over the work surface and forming a robust blanket of sterile air over the work surface, said means comprising an upstanding boundary wall extending around the perimeter of the work surface whereby the work surface and boundary wall form a tray, the boundary wall being hollow; and extending fully around the perimeter of the work surface whereby the filtered air is directed into the boundary wall and is emitted through air outlets in the boundary wall consisting essentially of air outlets facing inwardly of the boundary wall over the work surface from opposing sides, the boundary wall comprising first and second pairs of opposing, straight, parallel side walls,~~

means for giving rise to a substantially uniform and continuously replenished rising layer of filtered air over the work surface and for forming a blanket of sterile air over the work surface,
such that filtered air is emitted inwardly over the work surface from opposing, straight, parallel side walls in use.

2. (Previously Presented): A sterile air trolley as claimed in claim 1, wherein the sterile/filtered air is directed across the work surface from all directions inwardly of the boundary wall and forms the continuously replenished rising layer of filtered air over the work surface within the sterile zone / volume defined by the boundary wall.

3. (Cancelled)

4. (Previously Presented): A sterile air trolley as claimed in claim 1, wherein the shape of the tray is rectangular, with the boundary wall defining the four sides of the rectangle and wherein the filtered air is emitted inwardly over the work surface from all four sides.

5. (Previously Presented): A sterile air trolley as claimed in claim 4, wherein the trolley casing is in a modular form having a base unit housing the impeller and an upper unit comprising the tray-shaped work surface and boundary wall, the upper unit being readily demountable from and remountable to the base unit.

6. (Previously Presented): A sterile air trolley as claimed in claim 5 further comprising sterilized surgical instruments set out on the work surface of the upper unit and sealed in by a film, foil or lid of barrier material that is mounted above the work surface.

7. (Previously Presented): A sterile air trolley as claimed in claim 6, wherein the height of the boundary wall is slightly greater than the height of the any of the instruments or other items placed flat on the work surface of the tray in order to fully enshroud the same.

8. (previously presented): A sterile air trolley as claimed in claim 6, wherein the height of the boundary wall is on the order of 200 to 300mm while maintaining the blanket of sterile air.

9. (Previously Presented): A sterile air trolley as claimed in claim 1, wherein the rate of flow of air from the outlets is of the order of 0.4 to 0.5 meters per second, and no less than approximately 0.35 meters per second.

10. (Original): A sterile air trolley as claimed in claim 9, wherein that part of the boundary wall comprising the air outlets is in the form of a mesh or is densely perforated with many substantially uniformly distributed apertures to provide a substantially uniform flow of air through the boundary wall.

11. (Previously Presented): A sterile air trolley as claimed in claim 10, wherein the construction of the part of the boundary wall comprising the outlets is such as to provide a pressure drop of the order of at least 10 pascals.

12. - 13. (Cancelled)

14. (Currently Amended): A sterile air trolley comprising:
a mobile casing having at least one air inlet in its lower region and a plurality of air outlets in its upper region, and enclosing an impeller operative to move air in through the at least one inlet, through a filter and out of the casing by way of the outlets, the upper region of the casing providing a substantially horizontal work surface;
~~and means for giving rise to a continuously replenished rising layer of filtered air over the work surface and forming a robust blanket of sterile air over the work surface, said means comprising an upstanding boundary wall extending around the perimeter of the work surface whereby the work surface and boundary wall form a tray, the boundary wall being hollow and extending fully around the perimeter of the work surface whereby the filtered air is directed into the boundary wall and is emitted through air outlets in the boundary wall over the work surface from opposing sides, the air outlets facing only substantially inwardly towards the work surface from the boundary wall, the boundary wall comprising first and second pairs of opposing, straight, parallel side walls, such that filtered air is emitted inwardly over the work surface from opposing, straight, parallel side walls in use; and~~
means for preventing the entrainment of contaminants in the tray to a region outside of the tray by providing a substantially uniform flow of filtered air over the work surface in a continuously replenished rising layer.

15. (Previously Presented): A sterile air trolley as claimed in claim 14, wherein the sterile/filtered air is directed across the work surface from all directions inwardly of the boundary wall

and forms the continuously replenished rising layer of filtered air over the work surface within the sterile zone / volume defined by the boundary wall.

16. (Previously Presented): A sterile air trolley as claimed in claim 14, wherein the shape of the tray is rectangular, with the boundary wall defining the four sides of the rectangle and wherein the filtered air is emitted inwardly over the work surface from all four sides.

17. (Previously Presented): A sterile air trolley as claimed in claim 16, wherein the trolley casing is in a modular form having a base unit housing the impeller and an upper unit comprising the tray-shaped work surface and boundary wall, the upper unit being readily demountable from and re-mountable to the base unit.

18. (Previously Presented): A sterile air trolley as claimed in claim 17 further comprising sterilized surgical instruments set out on the work surface of the upper unit and sealed in by a film, foil or lid of barrier material that is mounted above the work surface.

19. (Previously Presented): A sterile air trolley as claimed in claim 18, wherein the height of the boundary wall is slightly greater than the height of the any of the instruments or other items placed flat on the work surface of the tray in order to fully enshroud the same.

20. (Previously Presented): A sterile air trolley as claimed in claim 1, wherein no air outlets are directed upwardly or outwardly.

21. (Previously Presented): A sterile air trolley as claimed in claim 14, wherein no air outlets are directed upwardly or outwardly.

22. (Previously Presented): A sterile air trolley as claimed in claim 1, wherein the upstanding boundary wall does not have a inwardly projecting lip.

23. (Cancelled)

24. (New) A sterile air trolley comprising:

a mobile casing having at least one air inlet in a lower region and a plurality of air outlets in an upper region, and enclosing an impeller operative to move air through the at least one air inlet, through a filter and out of the casing by way of the outlets, the upper region of the casing providing a substantially horizontal work surface;

an upstanding boundary wall extending around a perimeter of the work surface whereby the work surface and the boundary wall form a tray, the boundary wall being hollow; and

a plurality of opposing side walls forming an interior side of the boundary wall, the opposing side walls being densely perforated with many substantially uniformly distributed apertures that direct a substantially uniform flow of air through the boundary wall and over the work surface.